

**REMARKS**

This is in full and timely response to the Office Action mailed on February 1, 2008.

Claims 1-3, 5, 9-12, 14, and 16-18 are currently pending in this application, with claims 1, 11, and 18 being independent.

*No new matter has been added.*

Reexamination in light of the following remarks is respectfully requested.

**Restriction/Election**

The Office Action includes an indication on page 2 of an election made without traverse.

In response, there is no agreement of an election being made without traverse.

Similar to the election of November 13, 2007 as a reply to the previous restriction of October 16, 2007, the Applicant, through its representatives and attorneys, hereby provisionally elects, WITH traverse, the invention of the alleged Specie I, having claims 1-3, 5, 9-10, and 17 readable thereon.

**Traversal**

For the reasons provided hereinbelow, the Restriction Requirement is respectfully traversed.

**1. The above-identified application is an application under 35 U.S.C. §371**

The above-identified application was filed under 35 U.S.C. §371 and 37 C.F.R. §§1.494 or 1.495, being based upon international application No. PCT/JP2004/016995 having an International filing date of November 16, 2004.

Accordingly, M.P.E.P. §1893.03(d) provides that the **principles of unity of invention** are used to determine the types of claimed subject matter and the combinations of claims to different categories of invention that are permitted to be included in a single international or national stage patent application.

When making a lack of unity of invention requirement, the examiner must:

(1) **List the different groups of claims; and**

(2) **Explain why each group lacks unity with each other group** (i.e., why there is no single general inventive concept) specifically describing the unique special technical feature in each group. M.P.E.P. §1893.03(d).

**(1) List the different groups of claims**

The Restriction Requirement lists the presence of the following alleged species:

- Species I, claims 1-3, 5, and 9-10;
- Species II, claims 11-12, 14 and 16;
- Species III, claims 18 and 1.

In this regard, claims 1-3, 5, 9-12, 14, and 16-18. However, claim 17 is not listed within the claim groupings. As a result, the Restriction requirement is incomplete at least for this reason.

**(2) Explain why each group lacks unity with each other group**

**Claims 1-3, 5, 9-10, and 17** - Claims 2-3, 5, 9-10, and 17 are dependent upon claim 1.

Claim 1 is drawn to a liquid crystal display comprising

two substrates on which alignment films for orienting liquid crystal in a predetermined direction are formed, the alignment films facing each other across a predetermined gap by a sealing material to bond the pair of substrates between which a liquid crystal layer is sandwiched, wherein

the sealing material contains a filler having a mean particle size of less than 0.5  $\mu\text{m}$  and a maximum particle size of 1.5  $\mu\text{m}$  or less,

the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is 3  $\mu\text{m}$  or less.

**Claims 11-12, 14, and 16** - Claims 12, 14, and 16 are dependent upon claim 11. Claim 11 is drawn to a projection type display apparatus comprising:

a light source, a condensing optical system for guiding the light emitted from the light source to a liquid crystal display device, and

a projection optical system for enlarging and projection light modulated by the liquid crystal display device, wherein

the liquid crystal display device has two substrates on which alignment films for orienting liquid crystal in a predetermined direction are formed, the alignment films facing each other across a predetermined gap by a sealing material to bond the pair of substrates between which a liquid crystal layer is sandwiched,

the sealing material contains a filler having a mean particle size of less than 0.5 µm and a maximum particle size of 1.5 µm or less,

the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is 3 µm or less.

**Claim 18** - Claim 18 is drawn to a liquid crystal display apparatus comprising:

a liquid crystal display device having two substrates on which alignment films for orienting liquid crystal in a predetermined direction are formed, the alignment films facing each other across a predetermined gap by a sealing material to bond the pair of substrates between which a liquid crystal layer is sandwiched, wherein

the sealing material contains a filler having a mean particle size of less than 0.5 µm and a maximum particle size of 1.5 µm or less,

the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is 3 µm or less; and

means, including a light source and a condensing optical system, for guiding light emitted from the light source to said liquid crystal display and enlarging and projecting light modulated by the liquid crystal display device.

Page 3 of the Restriction Requirement contends that the Species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT 13.2, they lack the same or corresponding special technical features for the following reasons.

Specifically, the Office Action contends that each invention has limitation(s) that is directed toward an invention that would require a different search than that of other group

inventions and because each of the above inventions defining an invention that is distinct than that of the other and requiring a different search (Restriction Requirement at page 3).

In response, the Restriction Requirement of February 1, 2008 identifies claim 1 within both alleged Species I and III. As a result, this identification within the Restriction Requirement itself appears to somewhat suggest the features of claim one being within both the alleged Species I and III.

Furthermore, independent claim 1 includes that:

the sealing material contains a filler having a mean particle size of less than 0.5  $\mu\text{m}$  and a maximum particle size of 1.5  $\mu\text{m}$  or less,

the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is 3  $\mu\text{m}$  or less.

Additionally, independent claim 11 includes that:

the sealing material contains a filler having a mean particle size of less than 0.5  $\mu\text{m}$  and a maximum particle size of 1.5  $\mu\text{m}$  or less,

the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is 3  $\mu\text{m}$  or less.

Moreover, independent claim 18 includes that:

the sealing material contains a filler having a mean particle size of less than 0.5  $\mu\text{m}$  and a maximum particle size of 1.5  $\mu\text{m}$  or less,

the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is 3  $\mu\text{m}$  or less.

M.P.E.P. §1893.03(d) explains that a group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding special technical feature. The expression “special technical feature” is defined as meaning those technical features that define the contribution which each claimed invention, considered as a whole, makes over the prior art.

However, the Restriction Requirement fails to refer to the language found within the claims to explain why each group lacks unity with each other group.

Accordingly, the Restriction Requirement made within the Restriction Requirement of February 1, 2008 is improper.

## **2. No burden to the Examiner**

If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions. M.P.E.P. §803.

Specifically, practice and procedures within USPTO also dictate that not only must the art be searched within which the invention claimed is classifiable, but also all analogous arts regardless of where classified. M.P.E.P. § 904.01(c).

As such, the search and examination of an entire application can be made without serious burden, and the examiner must examine it on the merits, even though the application may include claims to distinct or independent inventions. M.P.E.P. §803.

Withdrawal of this Restriction Requirement and examination of all pending claims is respectfully requested.

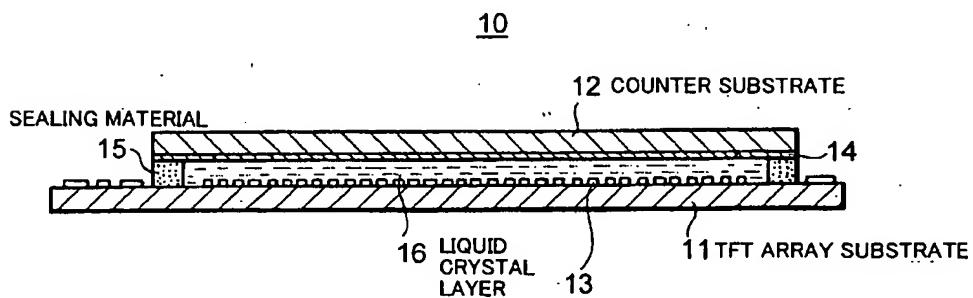
**Rejection under 35 U.S.C. §103**

Page 5 indicates a rejection of claims 1-3, 5, and 9-10 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 6,661,488 (Takeda) and U.S. Patent No. 5,327,271 (Takeuchi).

This rejection is traversed at least for the following reasons.

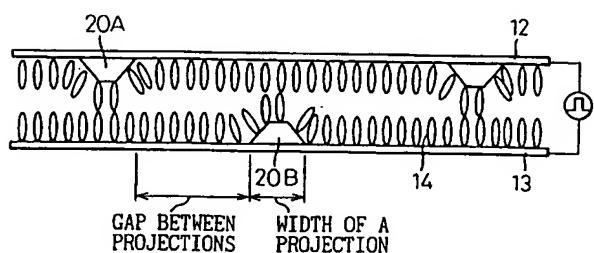
Figure 1 of the specification as originally filed is provided hereinbelow.

**FIG. 1**



Takeda - Figure 14B of Takeda is provided hereinbelow.

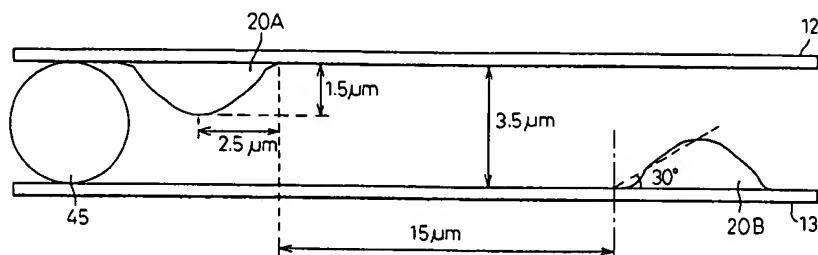
**F i g.14B**



However, Figure 14B fails to disclose, teach, or suggest the presence of a sealing member.

Figure 19 of Takeda is provided hereinbelow.

Fig. 19



Takeda arguably teaches the presence of a spacer 45 (Takeda at column 24, lines 60-63).

However, Takeda fails to disclose, teach, or suggest the spacer 45 as containing a filler having a mean particle size of less than 0.5 μm and a maximum particle size of 1.5 μm or less.

Figures 57A, B of Takeda are provided hereinbelow.

Fig. 57A

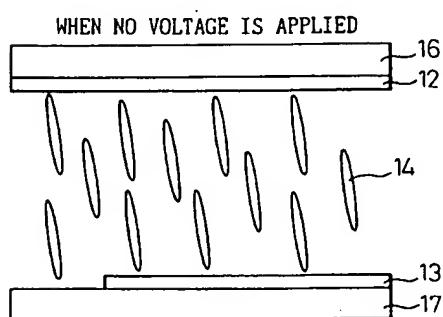
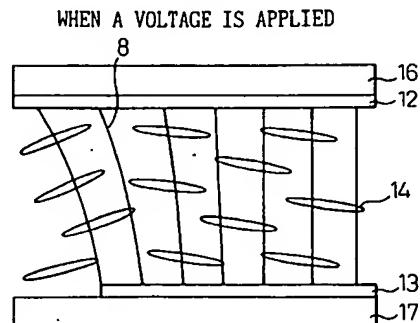


Fig. 57B



However, Figures 57A, B of Takeda fail to disclose, teach, or suggest the presence of a sealing member.

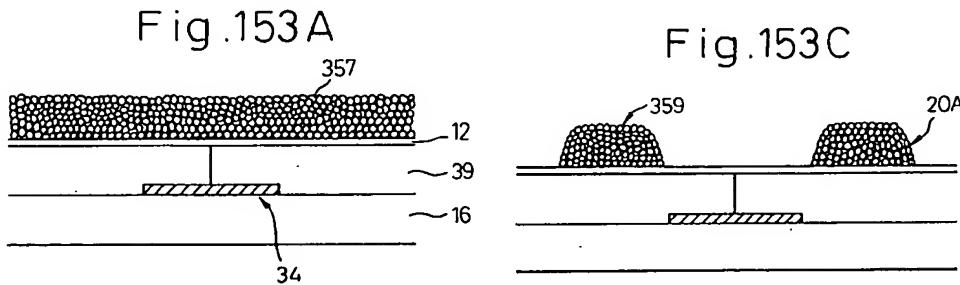
The Office Action refers to column 66, lines 32-35, of Takeda for the presence of a sealing member (Office Action at page 5).

In this regard, Takeda arguably teaches that the *fine alumina particles* 357 protrude from the surface of this protrusion 20A and fall off from the surface to form holes (Takeda at column 66, lines 15-17).

A non-photosensitive resin containing a great proportion of *fine alumina particles* 357 having a grain size of *not greater than 0.5 μm* is *applied onto the electrode 12* as shown in FIG. 153A (Takeda at column 66, lines 32-34).

The concave-convexities are formed similarly on the surface of the protrusion 20A but because the proportion of the *fine alumina particles* 357 mixed is great, a large number of concave-convexities are formed, and wettability can be much more improved than in the embodiment shown in FIG. 154 when the vertical alignment film is applied (Takeda at column 66, lines 43-48).

Figures 153A,C of Takeda are provided hereinbelow.

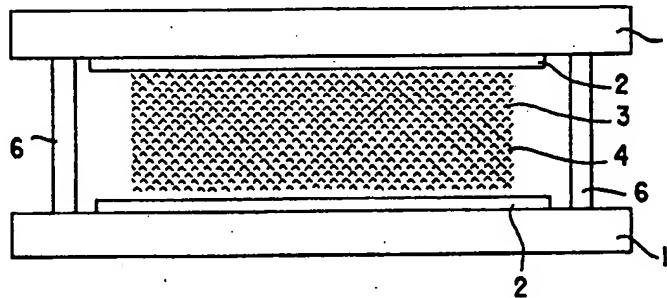


However, Takeda *fails* to disclose, teach, or suggest element 357 as being a sealing member.

- *Thus, Takeda fails to disclose, teach, or suggest the presence of a sealing material that contains a filler having a mean particle size of less than 0.5 µm and a maximum particle size of 1.5 µm or less.*

Takeuchi - Figure 1 of Takeuchi is provided hereinbelow.

FIG.1



Takeuchi arguably teaches the presence of a sealant 6 (Takeuchi at column 5, lines 18).

However, Takeuchi fails to disclose, teach, or suggest sealant 6 as containing a filler having a mean particle size of less than 0.5 µm and a maximum particle size of 1.5 µm or less.

- *Thus, Takeda fails to disclose, teach, or suggest the presence of a sealing material that contains a filler having a mean particle size of less than 0.5 µm and a maximum particle size of 1.5 µm or less.*

Withdrawal of this rejection and allowance of the claims is respectfully requested.

Page 6 indicates a rejection of claim 17 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 6,661,488 (Takeda) and U.S. Patent No. 5,327,271 (Takeuchi) and further in view of U.S. Patent No. 2005/0105016 (Kurihara).

This rejection is traversed at least for the following reasons.

Claim 17 is dependent upon claim 1.

**Kurihara** - The above-identified application claims the benefit of Japanese Application No. 2003-392940 filed on November 21, 2003.

Kurihara has a 371 filing date of May 27, 2004 and has a publication date of May 19, 2005.

Here, Kurihara is in the national stage ( 35 U.S.C. 371 ) of an International Application filed on or after November 29, 2000 and which was not published in English under PCT Article 21(2).

According to 35 U.S.C. 102 (e), no benefit of the international filing date (nor any U.S. filing dates prior to the IA) is given for 35 U.S.C. 102 (e) prior art purposes if the IA was published under PCT Article 21(2) in a language other than English, regardless of whether the international application entered the national stage. See M.P.E.P. §706.02(f)(1).

In this regard, the filing date of November 21, 2003 for Japanese Application No. 2003-392940 is earlier than either the 371 filing date of May 27, 2004 or the publication date of May 19, 2005 of the Kurihara reference.

Thus, the Kurihara appears to be unavailable as prior art and that the rejection of the claims using this reference should be withdrawn as a result. See M.P.E.P. §706.02(f)(1), example '5.

**Takeda and Takeuchi** - Takeda and Takeuchi, either individually or as a whole fail to disclose, teach or suggest all features of claim 17 at least for the reasons provided hereinabove and for the features that claim 17 recites.

Withdrawal of this rejection and allowance of the claims is respectfully requested.

### **Official Notice**

There is no concession as to the veracity of Official Notice, if taken in any Office Action. An affidavit or document should be provided in support of any Official Notice taken. 37 CFR 1.104(d)(2), MPEP § 2144.03. See also, *Ex parte Natale*, 11 USPQ2d 1222, 1227-1228 (Bd. Pat. App. & Int. 1989)(failure to provide any objective evidence to support the challenged use of Official Notice constitutes clear and reversible error).

### **Extensions of time**

Please treat any concurrent or future reply, requiring a petition for an extension of time under 37 C.F.R. §1.136, as incorporating a petition for extension of time for the appropriate length of time.

### **Fees**

The Commissioner is hereby authorized to charge all required fees, fees under 37 C.F.R. §1.17, or all required extension of time fees. If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

**Conclusion**

This response is believed to be a complete response to the Office Action. Applicants reserve the right to set forth further arguments supporting the patentability of their claims, including the separate patentability of the dependent claims not explicitly addressed herein, in future papers.

For the foregoing reasons, all the claims now pending in the present application are allowable, and the present application is in condition for allowance. Accordingly, favorable reexamination and reconsideration of the application in light of the remarks is courteously solicited.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753.

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Respectfully submitted,

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